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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,787	12/08/2003	Ho-Kyoon Chung	6161.0108.US	2371

7590 12/28/2004  
McGuire Woods LLP  
Suite 1800  
1750 Tysons Boulevard  
McLean, VA 22102

EXAMINER
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ARANCIBIA, MAUREEN GRAMAGLIA

ART UNIT	PAPER NUMBER
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1763

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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## Office Action Summary

Application No.

10/728,787

Applicant(s)

CHUNG ET AL.

Examiner

Maureen G. Arancibia

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 9 and 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group I, Claims 1-8 in the reply filed on 11/19/2004 is acknowledged. The traversal is on the ground(s) that the search for the subject matter of any one group of claims would encompass a search for the subject matter of the remaining claims, and that therefore a search of the entire application could be made without serious burden.

This is not found persuasive because while the search for one group of claims might overlap a search for the subject matter of the other group, there is no reason to expect that the searches would be coextensive. A search for the claims of Group I, drawn to a method of manufacturing a thin flat panel display, would be focused in class 216, while a search for the claims of Group II, drawn to a thin flat panel display, would extend the search to product classes and subclasses, such as class 348.

2. The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Objections***

3. Claims 4 and 8 are objected to because of the following informalities: it is unclear whether Applicant intends to claim that the upper and lower substrates should each individually have a thickness of at most 0.5 mm, or if the sum of the thicknesses of the upper and lower substrates should be at most 0.5 mm. Based on the Specification, (Page 8, Lines 12-13), the claims have been interpreted as reciting that the upper and lower substrates should each individually have a thickness of at most 0.5 mm.

Clarification of this point, and any appropriate correction are required.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3 and 5-8 rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 6,391,137 to Matsushima.

In regards to Claim 1, Matsushima teaches a prior art method of manufacturing a thin flat panel display (Figure 12), comprising: preparing an etchable upper substrate 2 and an etchable lower substrate 1; forming image display means (Column 1, Lines 45-49) on an inner surface of the lower substrate, and isolating them within device divisions 6; combining the upper and lower substrates, such that the image display means are individually sealed up by sealing materials 3 (Column 1, Lines 50-54 and 64-67); etching the outer surfaces of the upper and lower substrates (Column 2, Lines 15-20); and cutting the combined upper and lower substrates into individual image display units (Column 3, Lines 1-5).

In regards to Claim 2, the upper and lower substrates 1, 2, are formed of glass.  
(Column 1, Line 45)

In regards to Claim 3, the combining steps comprises attaching an unetchable protection film 4 to the lateral sides of the combined upper and lower substrates.  
(Column 1, Lines 54-56)

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In regards to Claim 5, Matsushima teaches a method of manufacturing a thin flat panel display, comprising: preparing an etchable upper substrate 101 and an etchable lower substrate 100; forming image display means 102 on the lower substrate; combining the upper and lower substrates so that the image display means is sealed up by sealant 105; and etching the outer surfaces of the substrates. (Column 8, Lines 32-36.

In regards to Claim 6, the substrates are formed of glass. (Column 7, Lines 49-50)

In regards to Claim 7, an unetchable protection film 203 is attached to the lateral sides of the combined upper and lower substrates. (Column 8, Lines 46-50)

In regards to Claim 8, each of the substrates is etched to each have a thickness of about 0.3 to 0.7 mm. (Column 9, Lines 1-3)

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsushima.

The prior art method taught by Matsushima was discussed above.

Matsushima does not expressly disclose that the prior art method can be used to etch the substrates to each have a thickness of at most 0.5 mm.

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However, the method taught by Matsushima as discussed in regards to Claim 8 teaches that each of the substrates 100, 101, is etched to each have a thickness of about 0.3 to 0.7 mm. (Column 9, Lines 1-3)

It would have been obvious to one of ordinary skill in the art to modify the prior art method disclosed by Matsushima to etch the substrates 1, 2, to each have a thickness of at most 0.5 mm. The motivation for doing so, as taught by Matsushima (Column 1, Lines 23), would have been to make a lightweight display device.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maureen G. Arancibia whose telephone number is (571) 272-1219. The examiner can normally be reached on core hours of 11-5, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Mills can be reached on (571) 272-1439. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Maureen G. Arancibia



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